IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Robert S. Lee et al.	Examiner:	Ana M. Fortuna
Serial No.:	09 909,488	Group Art Unit:	1723
Filed:	07/20/2001	Docket No.:	12897.10US01
Title:	NANOFILTRATION WATER-SOFTENING APPARATUS AND METHOD		

CERTIFICATE UNDER 37 CFR 1.8
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on July 24, 2002.

Cyndee Krenos

AMENDMENT AND RESPONSE

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In response to the first Office Action dated January 24, 2002, Applicants present the following amendments and remarks.

Amendments

Please amend claims 10 and 33 as follows:

10. The apparatus for softening water in accordance with claim 1, wherein the apparatus does not substantially increase the total salt levels of the output flows relative to the input flow of water.

33. The method for softening water in accordance with claim 31, wherein the method does not substantially increase the total salt levels of the output flows relative to the input flow of water.

Remarks

The Examiner has rejected claims 1-10, 12-25, 28-35, and 37-40 under 35 U.S.C. § 103(a) as being unpatentable over Collentro et al. (5,766,479) or Cluff (5,234,583). Applicants respectfully disagree with the assertion of these two references as the basis for obviousness of the claimed invention. These references utterly fail to teach or suggest the claimed invention of the instant application, which is directed to an apparatus for softening water. Collentro is directed to a membrane to pretreat water before subjecting it to acid treatment and reverse osmosis, while Cluff is directed to a swimming pool filtration system.

Applicants do not believe these reference create a *prima facia* case of obviousness, and Applicants call to the Examiner's attention that the Manual of Patent Examining Procedure (Section 2143) explicitly states that "to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."

We note that in establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference to arrive at the claimed invention. To this end, the